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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,362	09/14/2001	Bertram Gunzelmann	12816-022001	2923

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Fish & Richardson  
225 Franklin Street  
Boston, MA 02110-2804

EXAMINER

DEANE JR, WILLIAM J

ART UNIT	PAPER NUMBER
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2642

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/869,362

Applicant(s)

GUNZELMANN, BERTRAM

Examiner

William J. Deane

Art Unit

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10 - 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10 - 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2 pages
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim s 10, 12 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 95/33350 (Carney et al.).

With respect to claim 1, note modulator (18-2), demodulator (18-2), high frequency circuit 12, 14, 24, 26, 28, the transmission path to TDM bus 16, page 10, lines 28 – 34.

Note also, paths 15, 23, 208 of the high frequency circuit (12, 14 and 24, 26 and 28 that are in parallel in Figs. 2 and 4 and driver 208. Note also the paths 208, 212, 218 of the base band circuit are connected in parallel on the bus. Paths 15, 23, 208, 212 and 218 and the high frequency circuit 12, 14 and 24, 26 and 28 is where a second intermediate signal is passed from 14 via 15 to 18 – 1 are switched to become highly resistive in transmission (note claim 1).

Note paths 15, 23, 208, 212 and 218 and the high frequency circuit through which a first intermediate signal is passed from 18-2 via 23 and 24 are switched to a receiving mode (note tuner 12 and that signals from the tuner are passing through the bus).

With respect to claim 12, note page 7, lines 23 – 24.

With respect to claim 18, note digital filters 140 and 240.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 13 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carney et al. in view of U.S. Patent No. 6,810,266 (Ecklund et al.).

Carney et al. teach the claimed limitations except be explicit about the intermediate signals having in-phase and quadrature components. However, Ecklund shows that such a signal with both in-phase and quadrature components is old in the art (see Col. 4, lines 46 – 65). It would have been obvious to one of ordinary skill in the art to use such an intermediate signal having in-phase and quadrature components as taught by Ecklund et al. wherever it was deemed necessary.

With respect to claims 13 – 16, arranging signals in parallel is so old in the art that would have been obvious to arrange the signals in any manner deemed necessary.

With respect to claim 17, mixers are also notoriously old in the art and would be obvious to use mixers wherever it was deemed necessary. Note claims 1 and 5 – 6 of Ecklund et al.

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**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


U.S. Patent No. 6,545,516 (Ylamurto et al.) – note Figs. and Abstract;

U.S. Patent No. 6,011,785 (Carney et al.) – note Abstract and Figs.; and

U.S. Patent No. 4,464,791 (Eness) – note Abstract and Figs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bill Deane whose telephone number is (571) 272-7484.

In addition, facsimile transmissions should be directed to Bill Deane at facsimile number (703) 872-9314.

  
WILLIAM J. DEANE, JR.  
PRIMARY EXAMINER  
vp ~~11~~ JUN 05  
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